

**METHOD OF INITIALIZING AND USING A SECURITY ASSOCIATION
FOR MIDDLEWARE BASED ON PHYSICAL PROXIMITY**

ABSTRACT

A computer system, method, and computer program product for controlling data
5 communication in an ad-hoc network that connects a wireless device and a nearby wireless
device. The method stores an application directory, determines a priority for each entry in the
application directory, identifies a selected entry based on the priority, and examines the attributes
and security parameters associated with the selected entry. When the security parameters
indicate to use a secure connection, the method establishes a security association to support the
10 data communication by querying a database for an existing security association that will satisfy
the security parameters. When the query is successful, the method reuses the existing security
association. When the query is unsuccessful, the method creates a new security association by
establishing a privileged side channel to the nearby wireless device, negotiating the new security
association over the privileged side channel, and storing the new security association.